



## MEMORANDUM

**TO:** Mayor Gavin Newsom  
Board of Supervisors  
Health Service System Commissioners

**FROM:** Ed Harrington, Controller *[Signature]*

**DATE:** July 7, 2006

**SUBJECT:** Report on Postretirement Medical Benefits Under GASB 45 Prepared by  
Towers Perrin

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Currently, the City pays for and reports retiree medical benefits on a "pay as you go" basis, which is the practice of paying for these benefits as they become due each year. The City will be required to begin reporting the liability and related information for unfunded post retirement medical benefits in the City's financial statements for the fiscal year ending June 30, 2008. This new reporting requirement is defined under Governmental Accounting Standards Board (GASB) Statement Number 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*.

To help plan for the implementation of GASB-45, the Controller's Office, in coordination with the Health Service System and Human Resources Department, requested that Towers Perrin, the City's actuaries, prepare a preliminary actuarial valuation of this liability. Their report is attached and illustrates what the effect of GASB-45 would be if the City were to report the cost and liability as of June 30, 2006.

Towers Perrin's report estimates the City would have a liability of \$4.9 billion if we continued our "pay-as-you-go" policy. On the other hand, if the City started to fund retiree health benefits in the same way we fund pension benefits—as they are earned—that liability would drop to \$3 billion. The lower amount assumes that funds we set aside each year will have investment earnings that will offset the need of the City to contribute as much to pay for these costs.

GASB 45 does not require that the City actually fund this liability—rather it requires that we start to record and report a portion of the liability in each year if we do not fund it. The City has two years before this requirement is effective. As part of the planning for how the City will deal with this issue, Memoranda of Understandings negotiated this year with the City's labor unions included a provision calling for a Citywide committee to develop recommendations on how to fund retiree health benefits.

If you have any questions, please feel free to contact my office.

cc: Bart Duncan  
Phil Ginsburg  
Department Heads  
CCSF Labor Organizations





*City and County of San Francisco*  
*Retiree Health Benefit Plan*

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**Actuarial Valuation Report**

**Retiree Medical Benefit Plan Liabilities as of June 30, 2006 to  
Develop the Cost for Fiscal Year Ending June 30, 2007**

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*July 2006*

This report is confidential and intended solely for the information and benefit of the immediate recipient thereof. It may not be distributed to a third party unless expressly allowed under the "Actuarial Certification, Reliances and Distribution" section herein.

## *Contents*

<i>Introduction .....</i>	<i>1</i>
<i>Actuarial Certification, Reliances and Distribution.....</i>	<i>2</i>
<i>Basic Estimated Results for Postretirement Welfare Cost .....</i>	<i>3</i>
<i>Estimated Annual Required Contribution .....</i>	<i>4</i>
<i>Sensitivity Analysis.....</i>	<i>5</i>
<i>Actuarial Assumptions and Methods .....</i>	<i>6</i>
<i>Participant Data .....</i>	<i>14</i>
<i>Plan Provisions.....</i>	<i>16</i>
<i>Glossary .....</i>	<i>18</i>
<i>Documentation of Assumptions and Methods.....</i>	<i>20</i>

## Introduction

The City and County of San Francisco retained Towers Perrin to perform a valuation of its postretirement welfare benefit plans for the purpose of determining its annual cost in accordance with GASB Statement No. 45 – *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions* (GASB 45). The City will be required to report information on its financial statements under GASB 45 beginning with the 2007-08 fiscal year, so the purpose of this report is to illustrate for the City the effect that GASB 45 will have on the City's financial statements once reporting is required.

Actuarial valuation results are shown in this report on two bases: (1) assuming the plan is funded with assets that are not specifically dedicated to postretirement medical benefits, and (2) assuming that the plan is funded with assets that are specifically dedicated to postretirement medical benefits. The difference between these two valuation bases is the discount rate to be used to calculate the present value of future cash flows.

When the plan is funded with assets that are not dedicated to postretirement medical benefits (identified herein as "Unfunded Plan"), GASB 45 prescribes that the actuary use a discount rate that reflects the rate of return on the City's general funds. We have been instructed by the City that the rate to be used for this purpose is 4.50%. It is our interpretation of GASB 45 that the plan would be considered unfunded under the City's present funding practice because assets in the Health Service Trust Fund can be used to pay for medical benefits for both active and retired employees.

When the plan is funded with assets that are available only for postretirement medical benefits (identified herein as "Funded Plan"), GASB 45 directs the actuary to use a discount rate that reflects the rate of return on the funds that are dedicated to the benefits. We were instructed by the City to use a discount rate of 8.00% for this purpose. We understand that this rate is based on the present investment policy of the San Francisco Employees' Retirement System.

This report shows the City's Actuarial Accrued Liability (AAL) for benefits payable under the plan, and it shows the City's Annual Required Contribution (ARC) associated with those benefits, both those in pay status and those accruing to future retirees. The report also describes the actuarial assumptions and methods selected by the City for use in the calculation of these figures, and it also contains a glossary of terms used by GASB 45.

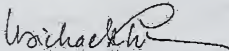
## Actuarial Certification, Reliances and Distribution

This valuation has been conducted in accordance with generally accepted actuarial principles and practices. The consulting actuaries are members of the Society of Actuaries and other professional actuarial organizations and meet their "General Qualification Standard for Public Statements of Actuarial Opinion" relating to postretirement welfare plans.

In preparing the results presented in this report, we have relied upon information provided to us regarding plan provisions, plan participants, and plan assets. We have reviewed this information for overall reasonableness and consistency but have neither audited nor independently verified this information. The accuracy of the results presented in this report is dependent upon the accuracy and completeness of the underlying information.

The results shown in this report have been developed on the basis of actuarial assumptions, selected by the City and County of San Francisco, which are considered to be reasonable and within the "best-estimate range" as described by the Actuarial Standards of Practice. Other actuarial assumptions could also be considered to be reasonable and within the best-estimate range. Thus, reasonable results differing from those presented in this report could have been developed by selecting different points within the best-estimate ranges for various assumptions.

The information contained in this report was prepared for the internal use of the City and County of San Francisco and its auditors in connection with the actuarial valuation of the postretirement welfare plan. It is neither intended nor necessarily suitable for other purposes. The City and County of San Francisco may distribute this actuarial valuation report to parties who have a legal right to require the City to provide them with this report, in which case the City will provide this report in its entirety including all assumptions, caveats and limitations.



Michael L. Kramer, F.S.A., M.A.A.A.  
Towers Perrin  
July 2006

## Basic Estimated Results for Postretirement Welfare Cost

The table below shows the actuarial valuation results under two funding scenarios: (1) that the assets used to pay plan benefits are not specifically dedicated to postretirement medical benefits ("Unfunded Plan"), and (2) that the assets used to pay plan benefits are specifically dedicated to postretirement medical benefits ("Funded Plan"). It is our interpretation of GASB 45 that the plan would be considered Unfunded under the City's present financial arrangement since funds can be used for either employees' or retirees' medical benefit costs.

	Results as of June 30, 2006	
	Unfunded Plan	Funded Plan
<b>Normal Cost for 2006-07</b>		
Medical Benefits	\$ 281,031,102	\$ 123,660,251
<b>Actuarial Accrued Liability (AAL)</b>		
Medical Benefits:		
▶ Inactive participants	\$ 2,676,143,586	\$ 1,630,183,921
▶ Active participants	<u>2,271,649,347</u>	<u>1,384,008,333</u>
Total AAL	\$ 4,947,792,933	\$ 3,014,192,254
<b>Valuation Payroll for 2006-07</b>		
Beginning of Year	\$ 1,995,199,455	\$ 1,995,199,455
Adjusted to Mid-Year	2,039,597,461	2,039,597,461
<b>Calculated Value of 2006-07 Benefit Costs</b>	<b>\$ 108,047,472</b>	<b>\$ 108,047,472</b>

## Estimated Annual Required Contribution

The table below shows the calculation of the Annual Required Contribution toward postretirement medical benefits under GASB 45. Note that the ARC shown below includes the pay-as-you-go cost for current retirees, so the net effect of GASB 45 on the City is the excess of the ARC over the pay-as-you-go cost.

### Results for Fiscal Year 2006-07

	Unfunded Plan	Funded Plan
<b>Normal Cost for 2006-07</b>		
Beginning of Year	\$ 281,031,102	\$ 123,660,251
Adjusted to Mid-Year	287,284,723	128,511,503
Percent of Payroll	14.09%	6.30%

### Funded Status at June 30, 2006

Actuarial Accrued Liability (AAL)	\$ 4,947,792,933	\$ 3,014,192,254
Value of Plan Assets	0	0
Unfunded Actuarial Accrued Liability (UAAL)	\$ 4,947,792,933	\$ 3,014,192,254

### UAAL Amortization for 2006-07

Amortization Method	Level Pct. of Payroll	Level Pct. of Payroll
Amortization Period	30 Years	30 Years
Amortization of UAAL, Mid-Year	\$ 168,596,442	\$ 161,698,360
Percent of Payroll	8.27%	7.93%

### Annual Required Contribution (ARC) for 2006-07

Normal Cost	\$ 287,284,723	\$ 128,511,503
Amortization of UAAL	<u>168,596,442</u>	<u>161,698,360</u>
Total ARC	\$ 455,881,165	\$ 290,209,863
Percent of Payroll	22.35%	14.23%

### Actuarial Cost Method

Entry Age Normal

Entry Age Normal

### Actuarial Assumptions

Investment Rate of Return	4.50%	8.00%
Projected Salary Increases	4.50%	4.50%



## Sensitivity Analysis

Under the City's current postretirement medical benefit program, future increases in health plan costs will be shared between the City and retirees. The actuarial valuation results are therefore very sensitive to the assumed rate of increase in health plan costs ("trend"). Because trend can vary significantly from year to year, the table below shows the effect on the City's Actuarial Accrued Liability and Annual Required Contribution if trend is one percentage point higher or lower in each future year than the assumption chosen by the City.

Fiscal Year 2006-07			
	Unfunded Plan		Funded Plan
<b>Actuarial Valuation Results using Assumptions as Chosen by the City</b>			
Actuarial Accrued Liability (AAL) at 6/30/06	\$ 4,947,792,933	\$	3,014,192,254
Normal Cost for 2006-07	287,284,723		128,511,503
Annual Required Contribution (ARC), 2006-07	455,881,165		290,209,863

### Results if Health Care Cost Trend is 1% Higher in Each Future Year

Actuarial Accrued Liability (AAL) at 6/30/06	\$ 6,060,499,068	\$	3,522,411,044
▶ Percent Difference	22.5%		16.9%
Normal Cost for 2006-07	\$ 363,985,479	\$	156,125,358
▶ Percent Difference	26.7%		21.5%
Annual Required Contribution (ARC), 2006-07	\$ 570,497,473	\$	345,087,455
▶ Percent Difference	25.1%		18.9%

### Results if Health Care Cost Trend is 1% Lower in Each Future Year

Actuarial Accrued Liability (AAL) at 6/30/06	\$ 4,097,505,859	\$	2,607,691,652
▶ Percent Difference	-17.2%		-13.5%
Normal Cost for 2006-07	\$ 230,112,361	\$	107,206,507
▶ Percent Difference	-19.9%		-16.6%
Annual Required Contribution (ARC), 2006-07	\$ 369,735,203	\$	247,097,870
▶ Percent Difference	-18.9%		-14.9%

## Actuarial Assumptions and Methods

### Economic Assumptions

Discount rate	4.50%
Salary increase rate	4.50%

### Medical Benefit Assumptions

Base year per capita plan costs: Per capita plan costs for 2006-07 for the self-insured City Health Plan were developed by Towers Perrin. Per capita plan costs for the insured plans were as quoted by the health plans. Medical and pharmacy rates were then age-adjusted based on national factors. The resulting per capita costs are as follows:

Age Bracket	City Health Plan			Expense
	Medical	Pharmacy	Vision	
40-44	\$3,930	\$1,521	\$46	\$424
45-49	4,337	1,568	46	424
50-54	5,090	1,616	46	424
55-59	6,385	1,679	46	424
60-64	8,206	1,874	46	424
65-69	2,291	2,179	46	424
70-74	2,794	2,244	46	424
75-79	3,182	2,288	46	424
80-84	3,485	2,112	46	424
85-89	4,055	1,884	46	424
90+	3,624	1,449	46	424

Age Bracket	Blue Shield			Expense
	Medical	Pharmacy	Vision	
40-44	\$2,974	\$849	\$46	\$6
45-49	3,282	875	46	6
50-54	3,852	902	46	6
55-59	4,831	937	46	6
60-64	6,210	1,046	46	6
65-69	2,128	1,738	46	6
70-74	2,596	1,790	46	6
75-79	2,956	1,778	46	6
80-84	3,237	1,685	46	6
85-89	3,767	1,503	46	6
90+	3,366	1,156	46	6

Base year per capita plan costs  
(continued):

Age Bracket	Health Net			Expense
	Medical	Pharmacy	Vision	
40-44	\$3,519	\$1,083	\$46	\$6
45-49	3,884	1,117	46	6
50-54	4,558	1,151	46	6
55-59	5,717	1,196	46	6
60-64	7,348	1,334	46	6
65-69	1,715	1,348	46	6
70-74	2,092	1,388	46	6
75-79	2,381	1,378	46	6
80-84	2,608	1,306	46	6
85-89	3,035	1,165	46	6
90+	2,712	896	46	6

Age Bracket	Kaiser			Expense
	Medical	Pharmacy	Vision	
40-44	\$2,872	\$904	\$46	\$6
45-49	3,170	931	46	6
50-54	3,720	960	46	6
55-59	4,666	997	46	6
60-64	5,998	1,113	46	6
65-69	1,855	1,657	46	6
70-74	2,263	1,706	46	6
75-79	2,577	1,694	46	6
80-84	2,822	1,606	46	6
85-89	3,284	1,432	46	6
90+	2,935	1,102	46	6

Plan cost trend rates:

Base Year	Plan 1	HMO		Medicare	
	Medical	Medical	Pharmacy	Part B	Vision
2006-07	9.0%	10.0%	10.0%	9.0%	3.0%
2007-08	8.5	9.5	9.5	8.5	3.0
2008-09	8.0	9.0	9.0	8.0	3.0
2009-10	7.5	8.5	8.5	7.5	3.0
2010-11	7.0	8.0	8.0	7.0	3.0
2011-12	6.5	7.5	7.5	6.5	3.0
2012-13	6.0	7.0	7.0	6.0	3.0
2013-14	5.5	6.5	6.5	5.5	3.0
2014-15	5.5	6.0	6.0	5.5	3.0
2015-16+	5.5	5.5	5.5	5.5	3.0

Plan cost trend rates (continued):

Base Year	Admin. Cost	10-County Amount
2006-07	4.5%	9.0%
2007-08	4.5	8.5
2008-09	4.5	8.0
2009-10	4.5	7.5
2010-11	4.5	7.0
2011-12	4.5	6.5
2012-13	4.5	6.0
2013-14	4.5	5.5
2014-15	4.5	5.0
2015-16+	4.5	4.5

Medical plan participation

For current retirees: actual elections, as reported. 94% of future retirees are assumed to elect a City-sponsored medical plan at retirement.

Future medical plan elections

For current retirees: actual elections, as reported. All others are assumed to elect City medical plans with the following frequencies:

Plan	Percent Electing	
	Before Age 65	After Age 65
City Health Plan	22%	34%
Blue Shield	7	1
Health Net	30	19
Kaiser	41	46

### Medicare Assumptions

Medicare eligibility

For those currently over age 65: as reported. For those not yet age 65, 95% are assumed to become eligible for Medicare when they reach age 65. This percentage has been factored into the per capita costs shown above.

Federal Part D subsidy

Federal subsidy of qualified Part D Plans (PDPs) is reflected in the per capita cost of these plans. This subsidy is shared between the City and retirees. Anticipated federal RDS subsidy payments are also shared with retirees in the form of reductions in contributions. RDS subsidy payments are not reflected as offsets against City costs or liabilities for purposes of the valuation.

## Demographic and Other Assumptions

### Mortality, healthy lives

Probabilities of death vary based on age, gender, employee status and the retirement plan in which members are participating. For SFERS members, mortality rates for healthy lives are based on the 1994 Group Annuity Mortality Table. For CalPERS members, mortality rates are combined for industrial and non-industrial death, based on tables developed by CalPERS. Sample rates are as follows:

Age	SFERS		CalPERS Pre-Retirement		CalPERS Post-Retirement	
	Male	Female	Male	Female	Male	Female
25	0.00066	0.00029	0.00034	0.00021		
30	0.00080	0.00035	0.00048	0.00031		
35	0.00085	0.00048	0.00067	0.00044		
40	0.00107	0.00071	0.00094	0.00063		
45	0.00158	0.00097	0.00130	0.00088		
50	0.00258	0.00143	0.00179	0.00125	0.00245	0.00136
55	0.00443	0.00229	0.00248	0.00178	0.00429	0.00253
60	0.00798	0.00444	0.00344	0.00256	0.00721	0.00442
65	0.01454	0.00864			0.01302	0.00795
70	0.02373	0.01373			0.02135	0.01276
75	0.03721	0.02269			0.03716	0.02156
80	0.06203	0.03940			0.06256	0.03883
85	0.09724	0.06774			0.10195	0.07219
90	0.15293	0.11627			0.17379	0.12592
95	0.23361	0.18621			0.25917	0.21773
100	0.31724	0.27643			0.34724	0.32036

## Mortality, disabled lives

Probabilities of death vary based on age, gender, job classification and the retirement plan in which members are participating. Sample rates are as follows:

Age	SFERS Miscellaneous		SFERS Safety		CalPERS Safety	
	Male	Female	Male	Female	Male	Female
25	0.00752	0.00536	0.00050	0.00070		
30	0.00773	0.00566	0.00070	0.00100		
35	0.00796	0.00595	0.00110	0.00150		
40	0.00865	0.00625	0.00170	0.00260		
45	0.01059	0.00757	0.00280	0.00380		
50	0.01459	0.01004	0.00400	0.00540	0.00546	0.00388
55	0.02115	0.01337	0.00590	0.00890	0.00616	0.00568
60	0.02870	0.01713	0.00980	0.01450	0.01016	0.00818
65	0.03617	0.02157	0.01630	0.02400	0.01853	0.01214
70	0.04673	0.02709	0.02610	0.03610	0.03369	0.01760
75	0.06552	0.03687	0.03890	0.05310	0.05768	0.02774
80	0.09481	0.05517	0.05770	0.08090	0.08670	0.04690
85	0.14041	0.08560	0.08620	0.11070	0.13032	0.08262
90	0.20793	0.13494	0.11790	0.16000	0.19588	0.13984
95	0.30792	0.21273	0.17520	0.25150	0.29444	0.23566
100	0.45599	0.33538	0.27510	0.39500	0.44259	0.35341

## Termination

Probabilities of termination for some employees vary by service, job classification and the retirement plan in which members are participating. Sample rates are as follows:

Service	SFERS Fire	SFERS Police	SFERS Craft	SFERS Muni	CalPERS Safety
0	0.0400	0.0100	0.0700	0.1000	0.1072
1	0.0150	0.0400	0.0300	0.0250	0.0841
2	0.0100	0.0200	0.0300	0.0250	0.0609
3	0.0100	0.0200	0.0300	0.0250	0.0470
4	0.0100	0.0200	0.0300	0.0250	0.0445
5	0.0100	0.0100	0.0300	0.0400	0.0421
10	0.0100	0.0100	0.0200	0.0250	0.0300
15	0.0050	0.0100	0.0100	0.0250	0.0178
20	0.0005	0.0050	0.0100	0.0250	0.0096
25	0.0000	0.0000	0.0000	0.0000	0.0053
30	0.0000	0.0000	0.0000	0.0000	0.0036

## Termination (continued)

Probabilities of termination for SFERS Miscellaneous employees vary by age and service. Sample rates are as follows:

Age	Less Than 1 Year of Service		3 Years' Service		5 or More Years' Service	
	Male	Female	Male	Female	Male	Female
25	0.1500	0.1500	0.1000	0.0750	0.0650	0.0500
30	0.1500	0.1250	0.0700	0.0750	0.0650	0.0500
35	0.1000	0.1250	0.0700	0.0750	0.0250	0.0300
40	0.1000	0.1000	0.0500	0.0500	0.0250	0.0300
45	0.1000	0.1000	0.0500	0.0250	0.0250	0.0250
50	0.1000	0.1500	0.0500	0.0250	0.0250	0.0250
55	0.1000	0.1500	0.0250	0.0250	0.0250	0.0250
60	0.2000	0.0750	0.0250	0.0250	0.0250	0.0250
65	0.2000	0.0750	0.0250	0.0250	0.0250	0.0250

## Disablement

Rates of disablement for some employees vary by age, job classification and the retirement plan in which members are participating. Sample rates are as follows:

Age	SFERS Fire	SFERS Police	SFERS Craft	SFERS Muni	CalPERS Safety
25	0.0003	0.0002	0.0000	0.0000	0.0013
30	0.0006	0.0005	0.0001	0.0001	0.0026
35	0.0015	0.0009	0.0006	0.0006	0.0039
40	0.0070	0.0012	0.0012	0.0011	0.0053
45	0.0050	0.0010	0.0024	0.0017	0.0066
50	0.0100	0.0160	0.0060	0.0080	0.0082
55	0.0500	0.0300	0.0200	0.0180	0.0140
60	0.1300	0.0008	0.0000	0.0000	0.0147
65	0.0000	0.0000	0.0000	0.0000	0.0147
70	0.0000	0.0000	0.0000	0.0000	0.0147
75	0.0000	0.0000	0.0000	0.0000	0.0147
80	0.0000	0.0000	0.0000	0.0000	0.0147

Rates of disablement for SFERS Miscellaneous employees vary by age and gender. Sample rates are as follows:

Age	Male	Female
25	0.0000	0.0000
30	0.0001	0.0002
35	0.0012	0.0015
40	0.0023	0.0025
45	0.0032	0.0060
50	0.0037	0.0060
55	0.0055	0.0100
60	0.0000	0.0000

## Retirement, SFERS members

Police and Fire employees covered under the old SFERS retirement plan are assumed to retire immediately. Retirement rates for other employees covered by SFERS vary by age, gender and job classification. Sample rates are as follows:

Age	Fire	Police	Craft	Muni	Miscellaneous	
					Male	Female
50	0.0200	0.0300	0.0300	0.0700	0.0200	0.0300
51	0.0200	0.0300	0.0200	0.0250	0.0200	0.0200
52	0.0200	0.0300	0.0200	0.0250	0.0200	0.0200
53	0.0200	0.0300	0.0300	0.0250	0.0200	0.0200
54	0.0200	0.0300	0.0300	0.0250	0.0450	0.0300
55	0.1000	0.1000	0.0400	0.0600	0.0450	0.0300
56	0.1000	0.1000	0.0400	0.0250	0.0450	0.0500
57	0.2000	0.1200	0.0400	0.0250	0.0450	0.0600
58	0.2000	0.1200	0.0550	0.1500	0.0450	0.0600
59	0.2000	0.1200	0.0550	0.2000	0.1000	0.0600
60	0.2000	0.3500	0.1500	0.2500	0.1200	0.1600
61	0.4000	0.2500	0.1800	0.1500	0.1400	0.1600
62	0.3500	0.2500	0.3000	0.4000	0.2800	0.2000
63	0.3000	0.2500	0.1800	0.1250	0.2000	0.1800
64	0.3000	0.2500	0.1800	0.2000	0.2000	0.2000
65	1.0000	1.0000	0.1500	0.2500	0.1500	0.1500
66			0.1500	0.2500	0.1500	0.1500
67			0.1500	0.2500	0.1500	0.1500
68			0.1500	0.2500	0.1500	0.1500
69			0.1500	0.2500	0.1500	0.1500
70			1.0000	1.0000	1.0000	1.0000

## Retirement, CalPERS members

Retirement rates for CalPERS members vary by age and service. Sample rates are as follows:

Age	Service at Retirement					
	5 Yrs.	10 Yrs.	15 Yrs.	20 Yrs.	25 Yrs.	30 Yrs.
50	0.0193	0.0193	0.0193	0.0193	0.0397	0.0600
51	0.0157	0.0157	0.0157	0.0157	0.0324	0.0491
52	0.0163	0.0163	0.0163	0.0163	0.0337	0.0510
53	0.0587	0.0587	0.0587	0.0587	0.1208	0.1829
54	0.0691	0.0691	0.0691	0.0691	0.1422	0.2154
55	0.1164	0.1164	0.1164	0.1164	0.2397	0.3630
56	0.0756	0.0756	0.0756	0.0756	0.1556	0.2357
57	0.0581	0.0581	0.0581	0.0581	0.1196	0.1812
58	0.0508	0.0508	0.0508	0.0508	0.1045	0.1583
59	0.0625	0.0625	0.0625	0.0625	0.1287	0.1949
60	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

## Spouse/partner coverage

Actual data are used for current retirees. 50% of male employees and 20% of female employees are assumed to elect spouse or partner coverage at retirement. Female spouses or partners are assumed to be 3 years younger than males.



#### Cash flows for postretirement welfare cost purposes:

- |                                      |  |
|--------------------------------------|--|
| ▶ Amount and timing of contributions | Contributions are made midyear.  |
| ▶ Timing of benefit payments         | Benefit payments are assumed to be made uniformly throughout the year and on average at midyear. |

#### Methods

Measurement date	Fiscal year-end.
Normal cost and AAL	Entry Age Normal actuarial cost method, allocated as a level percent of payroll, from the valuation date on or after date of hire to full eligibility date.
Amortization of UAAL	Level percent of covered payroll
Asset valuation	Not currently applicable.

#### Benefits Not Valued

Retirees' dental benefits are not included in this valuation. The dental plans offered to retirees by the City are fully insured and are separated from the dental plans for active employees for rating purposes. Retirees pay the full cost of these plans. Towers Perrin reviewed postretirement benefits with the City and County of San Francisco, and based on that review is not aware of any other significant benefits which were required to be valued but were not.

#### Data Sources

The City and County of San Francisco furnished participant data as of March 1, 2006 and plan design and cost information as of June 30, 2006. Data were reviewed for reasonableness and consistency, but no audit was performed. Assumptions or estimates were made by Towers Perrin based on input from the City when data were not available. We are not aware of any errors or omissions in the data that would have a significant effect on the results of our calculations.

Data supplied for CalPERS members were not specific as to the individuals' job classifications. This omission is potentially material because CalPERS applies actuarial assumptions that vary by job classification. After discussion with the City, it was determined that the majority of the CalPERS members fell into the classification of "County Peace Officers" with a retirement benefit of "3% at 55." All CalPERS members were therefore treated this way in the actuarial valuation. We do not expect that this assumption had a material effect on the valuation results.

Data supplied for disabled retirees did not specify whether the disability was job-related. After discussion with the City, we assumed that all disabilities for Safety members were industrial while all disabilities for Miscellaneous members were non-industrial. We do not expect that this assumption had a material effect on the valuation results.

## Participant Data

### Summary of Participant Data

	Number of Members	Average Age	Average Service
Active Members:			
‣ SFERS	26,693	47.7	13.6
‣ CalPERS	<u>1,403</u>	<u>44.9</u>	<u>10.0</u>
‣ Total	28,096	47.6	13.5
Vested Terminated Participants:			
‣ SFERS	1,612	46.6	8.9
‣ CalPERS	<u>21</u>	<u>46.2</u>	<u>N/A</u>
‣ Total	1,633	46.6	8.9
Healthy Retirees:			
‣ SFERS	12,782	71.5	N/A
‣ CalPERS	<u>360</u>	<u>63.6</u>	N/A
‣ Total	13,142	71.3	N/A
Disabled Retirees:			
‣ SFERS	2,142	66.3	N/A
‣ CalPERS	<u>0</u>	<u>NA</u>	N/A
‣ Total	2,142	66.3	N/A
Spouses of Retirees:			
‣ SFERS	4,921	59.9	N/A
‣ CalPERS	<u>132</u>	<u>51.6</u>	N/A
‣ Total	5,053	59.6	N/A

# Age and Service Distribution of Active Members

Age Nearest Birthdate	Completed Years of Service								Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	Over 34	
20 to 24	101	4	0	0	0	0	0	0	105
25 to 29	634	225	7	0	0	0	0	0	866
30 to 34	910	894	162	2	0	0	0	0	1,968
35 to 39	930	1,538	681	209	15	0	0	0	3,373
40 to 44	722	1,554	967	681	228	19	0	0	4,171
45 to 49	583	1,343	819	994	839	387	7	0	4,972
50 to 54	477	1,108	692	931	955	859	230	14	5,266
55 to 59	320	792	565	662	746	810	509	115	4,519
60 to 64	125	350	244	305	319	335	222	121	2,021
65 to 69	24	86	119	123	85	82	57	48	624
Over 69	9	22	33	40	41	24	15	27	211
Total	4,835	7,916	4,289	3,947	3,228	2,516	1,040	325	28,096



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## Plan Provisions

The following summary of plan provisions represents our understanding of the substantive plan.

### Medical Benefits

Eligibility	The plan provides benefits to individuals who terminate service with the City through service retirement, disability retirement and vested termination.
Retirement date	Age 50 with 5 years of service.
Service retirement	Employees who retire from active status after attaining age 50 and completing 5 years' service can immediately commence medical benefits.
Vested termination	Employees who complete 5 years of service at termination can immediately commence medical benefits when they retire after attaining age 50.
Disability retirement	Employees who become disabled due to duty-related disability and retire can immediately commence medical benefits. Employees with 5 years of service who become disabled due to non-duty-related disability and retire can immediately commence medical benefits.
Dependent eligibility	Spouses and children of the retiree are eligible for the plan. Domestic partners of the retiree and their children are also eligible on the same basis as spouses and children.
Survivor eligibility	Upon the death of a covered retiree, coverage can continue for life to a spouse or domestic partner.
Member contributions	<p>Each plan year, the City conducts a survey of the 10 most populous counties in California to determine the average employer contribution made toward employee medical coverage. The City is required by Charter to contribute this average value, called the "10-county survey amount," toward medical coverage for each active employee. The difference between the total cost of coverage and the 10-county survey amount is the employee's required contribution under the Charter. City bargaining units have also negotiated City contributions in addition to the 10-county survey amount.</p> <p>Non-Medicare eligible retirees are required to contribute for their own coverage 50% of the amount that an employee in the same health plan pays under the Charter, irrespective of any negotiated City contributions in addition to the 10-county survey amount.</p> <p>Medicare eligible retirees contribute for their own coverage 50% of the difference between the contribution for an active employee in the same health plan (under the Charter) and the Medicare Part B premium.</p> <p>Retirees contribute 50% of the cost of medical coverage for one dependent and 100% of the cost of coverage for any additional dependents.</p>

<b>Member contributions (continued)</b>	Surviving spouses and domestic partners of deceased retirees contribute the same amounts as retirees.
<b>Plans available</b>	Retirees can choose among the City Health Plan (a PPO) and three HMOs (Blue Shield, Health Net and Kaiser). Retirees with Medicare who choose Kaiser will be enrolled in the Senior Advantage plan. Retirees with Medicare who choose Health Net will be enrolled in the Seniority Plus plan if they live in an area served by that plan. All other retirees will be enrolled in a plan that coordinates benefits with Medicare.
<b>Vision Benefits</b>	All retirees covered under a City sponsored medical plan receive vision benefits. The contributions calculated as described above take into account the cost of the vision benefits. Vision benefits for all retirees are administered by Vision Service Plan.
<b>Dental Benefits</b>	Retirees can choose among a dental PPO (Delta Premier) and two dental prepaid plans (PMI and Pacific Union). Retirees' dental plans are rated separately from employees' dental benefits, and retirees pay the full cost of dental coverage for themselves and their dependents. Dental benefits have therefore been excluded from the actuarial valuation.
<b>Other Postretirement Welfare Benefits</b>	None.

## Glossary

**Actuarial assumptions.** Assumptions as to the occurrence of future events affecting retirement costs, such as: mortality, withdrawal, disablement and retirement, changes in compensation and investment earnings.

**Actuarial accrued liability.** That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of benefits and expenses, which is not provided for by future Normal Costs.

**Actuarial cost method or funding method.** A procedure for determining the Actuarial Present Value of benefits and expenses and for developing an actuarially equivalent allocation of such value to time periods, usually in the form of a Normal Cost and an Actuarial Accrued Liability.

**Actuarial gain (loss) or experience gain (loss).** A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates, as determined in accordance with a particular Actuarial Cost Method.

**Actuarial present value of total projected benefits.** Total projected benefits include all benefits estimated to be payable to plan members (retirees and beneficiaries, terminated employees entitled to benefits but not yet receiving them, and current active members) as a result of their service through the valuation date and their expected future service. The actuarial present value of total projected benefits as of the valuation date is the present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment.

**Actuarial valuation.** The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a benefit plan.

**Actuarial value of assets or valuation assets.** The value of cash, investments and other property belonging to a benefit plan, as used by the actuary for the purpose of an Actuarial Valuation.

**Amortization payment.** That portion of the benefit plan contribution which is designed to amortize the Unfunded Actuarial Accrued Liability.

**Annual required contributions of the employer (ARC).** The employer's periodic required contributions to a defined benefit OPEB plan, calculated in accordance with the parameters.

**Defined benefit OPEB plan.** An OPEB plan having terms that specify the *benefits* to be provided at or after separation from employment. The benefits may be specified in dollars (for example, a flat dollar payment or an amount based on one or more factors such as age, years of service, and compensation), or as a type or level of coverage (for example, prescription drugs or a percentage of healthcare insurance premiums).

**Employer's contributions.** Contributions made in relation to the annual required contributions of the employer (ARC). An employer has made a contribution in relation to the ARC if the employer has (a) made payments of benefits directly to or on behalf of a retiree or beneficiary, (b) made premium payments to an insured or (c) irrevocably transferred assets to a trust, or equivalent arrangement, in which plan assets are dedicated to providing benefits to retirees and the beneficiaries in accordance with the terms of the plan and are legally protected from creditors of the employer(s) or plan administrator.





**Entry age actuarial cost method.** A method under which the Actuarial Present Value of the Projected Benefits of each individual included in an Actuarial Valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age(s). The portion of this Actuarial Present Value allocated to a valuation year is called the Normal Cost. The portion of this Actuarial Present Value not provided for at a valuation date by the Actuarial Present Value of future Normal Costs is called the Actuarial Accrued Liability.

**Funded ratio.** The actuarial value of assets expressed as a percentage of the Actuarial Accrued Liability.

**Healthcare cost trend rate.** The rate of change in per capita health claims costs over time as a result of factors such as medical inflation, utilization of healthcare services, plan design, and technological developments.

**Investment return assumption (discount rate).** The rate used to adjust a series of future payments to reflect the time value of money.

**Medicare Modernization Act (MMA).** The federal law which created Medicare Part D.

**Net OPEB obligation.** The cumulative difference since the effective date of this statement between annual OPEB cost and the employer's contributions to the plan including the OPEB liability (asset) at transition, if any, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to OPEB-related debt.

**Normal cost.** That portion of the Actuarial Present Value of benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.

**Other postemployment benefits (OPEB).** Postemployment benefits other than retirement benefits. Other postemployment benefits include postemployment healthcare benefits, regardless of the type of plan that provides them, and all postemployment benefits provided separately from a retirement plan, excluding benefits defined as termination offers and benefits.

**Pay-as-you-go.** A method of financing a benefit plan under which the contributions to the plan are generally made at about the same time and in about the same amount as benefit payments and expenses become due.

**Plan assets.** Resources, usually in the form of stocks, bonds, and other classes of investments, that have been segregated and restricted in a trust or equivalent arrangement, in which (a) employer contributions to the plan are irrevocable, (b) assets are dedicated to providing benefits to retirees and their beneficiaries, and (c) assets are legally protected from creditors of the employer or plan administrator, for the payment of benefits in accordance with the terms of the plan.

**Plan members.** The individuals covered by the terms of a benefit plan. Plan membership generally includes employees in active service, terminated employees who have accumulated benefits but are not yet receiving them and retired employees and beneficiaries currently receiving benefits.

**Substantive plan.** The terms of an OPEB plan as understood by the employer and plan members.

**Unfunded actuarial accrued liability.** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets.

## Documentation of Assumptions and Methods

Towers Perrin considered historical information that had been developed for the two retirement plans in which City employees and retirees participate, SFERS and CalPERS. Previous actuarial valuations for SFERS have been performed by Towers Perrin. We have chosen these assumptions to be as realistic as possible to anticipate appropriately the City's postretirement medical plan costs based on the plan design and participant population at this time. Since this is the first valuation completed for the City's postretirement medical plan, we expect that it will be appropriate to revisit the actuarial assumptions in future years as experience develops, both within the City and at other agencies required to conduct actuarial valuations under GASB 45.

### Economic Assumptions

If there is not an irrevocable trust established to pay benefits, GASB 45 requires that the employer's expected return on its own invested assets be used to determine the discount rate. If there is an irrevocable trust into which the Annual Required Contribution (ARC) is deposited, then the expected return based on the mix of investments within that trust should be considered. If over time, less than the ARC is contributed, then a pro-rata investment return based on both employer assets and trust assets would be used.

A final decision regarding pre-funding of postretirement medical benefits in an irrevocable trust has not yet been made by the City. We have therefore performed valuations assuming an unfunded plan – i.e., using a 4.5% discount rate as selected by the City based on rates of return on general City assets currently being recognized by the City treasurer – and a funded plan – i.e., using an 8% discount rate, the same as is currently used in actuarial valuations of SFERS.

The 4.5% salary increase rate was selected by the City based on recent experience. This assumption is used to spread plan costs as a percent of payroll.

### Medical Benefit Assumptions

Total City Health Plan costs were based on calculations made for the City for 2006-07 by Towers Perrin. The calculations were based on the latest claim and enrollment information available. Costs were then age-adjusted based on Towers Perrin's national health care utilization factors.

Total HMO medical and pharmacy benefit costs were based on rates negotiated for the 2006-07 plan year by the City and Towers Perrin. Costs were age-adjusted based on national utilization factors.

Total vision benefit costs were based on rates negotiated for 2006-07 by the City and Towers Perrin. Expense charges for the City Health Plan were based on administrative fees negotiated by the City and Towers Perrin, and administrative fees for all plans included a charge for additional expenses paid by the plans.

Medical plan cost trend rates for the City Health Plan which start at 9% and decline to an ultimate rate of 5.5% are consistent with Towers Perrin's assumptions for other postretirement medical valuations and represent both current plan experience and a realistic expectation of long-term trend.

Cost trend rates for the City's HMOs begin at 10% and grade down to 5.5%. This assumption reflects recent experience, in which HMO rate increases have exceeded those of the City Health Plan. It is also



consistent with the findings of Towers Perrin's latest national Health Care Cost Survey. Over the long term, we expect the HMOs' costs to increase at the same rate as the cost of the City Health Plan.

Pharmacy plan trend rates start at 10% and grade down to 5.5%. This assumption is also consistent with recent experience and with Towers Perrin's national data and represents a belief that pharmacy costs are currently increasing slightly faster than PPO medical costs but will ultimately trend toward the same rate of increase.

Medicare Part B premiums, used in the calculation of participant contributions, are expected to increase at the same rate as City Health Plan costs.

Vision plan trend rates are projected at 3% for all future years, reflecting the City's experience over the recent past and Towers Perrin's expectations for the future.

Administrative cost trend rates are projected at 4.5% for all future years. This reflects the most recent negotiated agreement with Uniprise, administrator of the City Health Plan.

The 10-county survey amount is projected to increase at a rate that is consistently one percentage point below the rate of increase in the City's HMOs. This reflects the fact that the counties that comprise the survey have, over time, typically implemented plan changes, introduced new plans and terminated under-performing plans in their own efforts to control costs.

Medical plan participation rates and plan election preferences are based on historical City experience.

### **Medicare Assumptions**

Most City employees will be eligible for Medicare when they reach age 65; however, some employees do not participate in Medicare. Medicare eligibility for future retirees is based on historical experience. We expect that, over time, this assumption will change to reflect gradually increasing Medicare participation.

The City's medical plans for Medicare eligible retirees include two qualified Medicare Advantage (MA) plans – Kaiser Senior Advantage and Health Net Seniority Plus – two qualified Enhanced Part D Plans (PDP) – Blue Shield and Health Net Medicare COB – and two plans for which the City has filed for federal Retiree Drug Subsidy (RDS) – the City Health Plan and Kaiser Cost Plan. Federal subsidy of the MA and PDP plans has taken the form of reduced premiums paid to the vendors, and these cost reductions have been reflected in the actuarial valuation.

For the plans for which the City is receiving federal subsidy under the RDS program, the City has chosen to share the subsidy with retirees in the form of reduced contributions. These contribution reductions have been reflected in the actuarial valuation, but under the rules promulgated by GASB, the RDS payments which the City will receive have not been reflected.

### **Demographic and Other Assumptions**

Mortality tables used in the actuarial valuation are the same as those used in the valuations of the retirement systems – SFERS and CalPERS – in which members participate.

Termination rates used in the actuarial valuation are the same as those used in the valuations of the retirement systems – SFERS and CalPERS – in which members participate. For purposes of this valuation, rates of termination with refund and termination with vested benefits were combined, since either event can trigger deferred eligibility for postretirement medical benefits.

Disablement rates used in the actuarial valuation are the same as those used in the valuations of the retirement systems – SFERS and CalPERS – in which members participate. All disablements of Safety members were assumed to be industrial, and all disablements of Miscellaneous members were assumed to be non-industrial.

Retirement rates used in the actuarial valuation are the same as those used in the valuations of the retirement systems – SFERS and CalPERS – in which members participate.

The assumed prevalence of spouse or domestic partner coverage was based on recent experience among City retirees. We note that this assumption differs from the assumed marriage rate used in the actuarial valuations of the two retirement systems; however, we believe that the different assumptions reasonably represent the experience of the respective plans.

### **Methods**

The Entry Age Normal actuarial cost method was selected by the City. It is the most common method used in actuarial valuations of public sector pension funds. Typical practice for retiree medical valuations has not yet been established; however, we expect that the Entry Age Normal method will be widely used in these valuations.

The UAAL is amortized as a level percent of payroll, consistent with GASB requirements. The maximum amortization period allowed under GASB 45 is 30 years.

